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| APPLICATION NO. FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|------------------------------------------|-----------------|----------------------|------------------------|------------------|--|--|
| 09/801,400 | 03/07/2001 | Harald Bock | 112740-191 | 4054 | | |
| 29177 7 | 7590 02/13/2004 | EXAMINER | | | | |
| BELL, BOYD & LLOYD, LLC | | | SEDIGHIA | SEDIGHIAN, REZA | | |
| P. O. BOX 1135 CHICAGO, IL 60690-1135 | | | ART UNIT | PAPER NUMBER | | |
| | | | 2633 | ر., | | |
| | | | DATE MAILED: 02/13/200 | 4 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| 4 | | | Application | n No. | Applicant(s) | • | | | |
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| | fice Action Summers | | 09/801,400 |) | HARALD BOCK E | T AL. | | | |
| . • 01 | Office Action Summary | | Examiner | | Art Unit | | | | |
| | | | M. R. Sedig | | 2633 | | | | |
| Period for Rep | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | | | | |
| | onsive to communication(s) f | filed on <i>07 Ma</i> | rch 2001. | | | | | | |
| | action is FINAL . | 2b)⊠ This a | | n-final. | | | | | |
| 3) Since | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Disposition of Claims | | | | | | | | | |
| 4) Claim(s) 1-7 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-7 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | | | |
| Application Papers | | | | | | | | | |
| 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on <u>07 March 2001</u> is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) The translation of the foreign language provisional application has been received. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. | | | | | | | | | |
| Attachment(s) | | | | | | | | | |
| 2) Notice of Draf | erences Cited (PTO-892) ftsperson's Patent Drawing Review isclosure Statement(s) (PTO-1449) | | 5 | | (PTO-413) Paper No(s atent Application (PTC | | | | |

Application/Serial Number: 09/801,400

Art Unit: 2633

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-2, 4, and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagel et al. (US Patent No: 5,481,399) in view of Chawki et al. (US Patent No: 5,576,875).

Regarding claims 1, 4, and 5-6, Nagel teaches a system (fig. 2B) for suppressing instabilities in an optical wavelength division multiplex system (col. 2, lines 10-15, col. 3, lines 51-61), comprising: a first filter (24, fig. 2B) device having a low stopband attenuation only for individual optical signals which are in transmission channels (col. 4, lines 4-10), and further having a high-band attenuation outside the transmission channels in an entire wavelength range critical for instabilities (col. 4, lines 10-14); and a second filter (30, fig. 2B) which combines the individual optical signals with, if determined to be appropriate, launched optical signals so as to form one wavelength division multiplex signal (col. 4, lines 23-30). Nagel differs from the claimed invention in that Nagel does not specifically disclose the system is used in an optical multiplex ring network and the first filter device inserted in an optical conductor of the ring network. Chawki teaches an optical add-drop filter can be placed in an optical ring network (col. 2, lines 14-17, col. 3, lines 10-15, 23-28). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate an optical add-drop filter such as the one of Nagel in a multiplex ring network, as it is taught by Chawki, in order to add and drop specific channels within the network and to suppress noise signals.

Application/Serial Number: 09/801,400

Art Unit: 2633

Regarding claim 2, Nagel teaches the first and second filter are incorporated to a single module (col. 4, lines 4-8 and 20, fig. 2), and output of the first filter is connected to the input of the second filter (24, 30, fig. 2B).

Regarding claim 4, Nagel teaches the first filter is a demultiplexer (col. 4, lines 6-7) and the second filter is a multiplexer (col. 4, line 8).

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagel et al. (US Patent No: 5,481,399) in view of Chawki et al. (US Patent No: 5,576,875) and in further view of Strasser et al. (US Patent No: 5,850,302), or Henmi (US Patent No: 6,137,603).

Regarding claim 3, the modified optical add-drop device of Nagel and Chawki differs from the claimed invention in that Nagel and Chawki do not disclose the first filter is a Bulk filter, or an AWG filter. Strasser teaches a Bulk filter (col. 6, lines 52-55). Henmi teaches an AWG add-drop filter (col. 1, lines 26-31). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate an optical Bulk filter such as the one of Strasser, or an AWG filter, such as the one of Henmi for the optical filter in the modified optical add-drop device of Nagel and Chawki in order to provide a filter that is easily customized and that is readily adaptable to a wide range of applications and that can reduce crosstalk between adjacent channels.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagel et al. (US Patent No: 5,481,399) in view of Chawki et al. (US Patent No: 5,576,875) and in further view of Aida et al. (US Patent No: 5,005,937).

Application/Serial Number: 09/801,400

Art Unit: 2633

Regarding claim 7, the modified optical add-drop device of Nagel and Chawki differs from the claimed invention in that Nagel and Chawki do not disclose transmission of optical signals in the range of 1.53 µm to 1.565 µm. Aida teaches transmission of optical signals in the range of 1.53 µm to 1.565 µm (col. 4, lines 54-60). Therefore, it would have been obvious to an artisan at the time of invention that the modified optical transmission system of Nagel and Chawki can transmit optical signals in the range of 1.53 µm to 1.565 µm, as it is taught by Aida, in order to transmit a plurality different optical signals.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Henmi (US Patent No: 6,137,603) is cited to show a ring network employing an Arrayed-Waveguide-Grating ADM filters (col. 1, lines 27-30).

Antoniades et al. (US Patent No: 6,115,154) is cited to show a ring network (fig. 4) that includes add-drop elements (400₁, fig. 4 and col. 5, lines 13-35).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. R. Sedighian whose telephone number is (703) 308-9063. The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (703) 305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

M.R. SEDIGHIAM

Patent Examiner

Art Unit: 2633